

REMARKS

Claims 8 and 10-12 have been cancelled, and claims 7, 9 and 13 have been amended. Claims 1-7, 9 and 13 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

5-6. Claims 1-13 currently stand rejected for allegedly being obvious in view of published U.S. application 2002/0172275 to Birru (hereinafter "Birru") in view of Applicant's Admitted Prior Art (AAPA).

Claim 1 recites an adaptive equalizer comprising a Viterbi decoder having 16 stages and a decision feedback equalizer that has more than 16 taps. Assuming for the moment, without admitting that Birru and AAPA are even properly combinable, it is respectfully submitted that the resultant combination is still incapable of rendering claim 1 obvious since the resultant combination fails to suggest the relationship that the number of decision equalizer taps is greater than the Viterbi decoder states. Specifically, Birru discloses that the number of trellis decoder stages is equal to the number of decision feedback equalizer taps. Birru states "[t]he filter coefficients of decision feedback equalizer filter (DFE) 720 at time k are $g^k = \{g^k_1, g^k_2, \dots, g^k_{N2}\}$." [¶0095] Thus, Birru clearly teaches that the decision feedback equalizer includes $N2$ taps. Similarly, Birru clearly states that the trellis decoder disclosed therein includes $N2$ stages with the statement "[t]he outputs of trellis decoder 250 at time k are $a^k = \{a^k_1, a^k_2, \dots, a^k_{N2}\}$." [¶0096]. Also see ¶0096 and ¶0097 that disclose the DFE has $N2$ number of taps and the trellis decoder has $N2$ stages. There is simply no suggestion in Birru, or in the combination of Birru and the AAPA, that the number of taps in the decision feedback equalizer is greater than the number of stages in the trellis decoder.

Thus, it is respectfully submitted that a fair and proper reading of Birru reveals that the combined teachings of Birru and AAPA are incapable of rendering claim 1 obvious.

Claims 4, 7 and 13 also recite the feature that the number of stages in the decoder is different than the number of taps in the decision feedback equalizer. Accordingly, it is respectfully submitted that these claims are patentable for at least the reasons set forth above.

Reconsideration and allowance of claims 1-7, 9 and 13 is respectfully requested. No new matter has been added.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



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